

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-237086

(43)Date of publication of application : 23.08.2002

(51)Int.Cl.

G11B 7/135

G11B 7/125

(21)Application number : 2001-035290

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(22)Date of filing : 13.02.2001

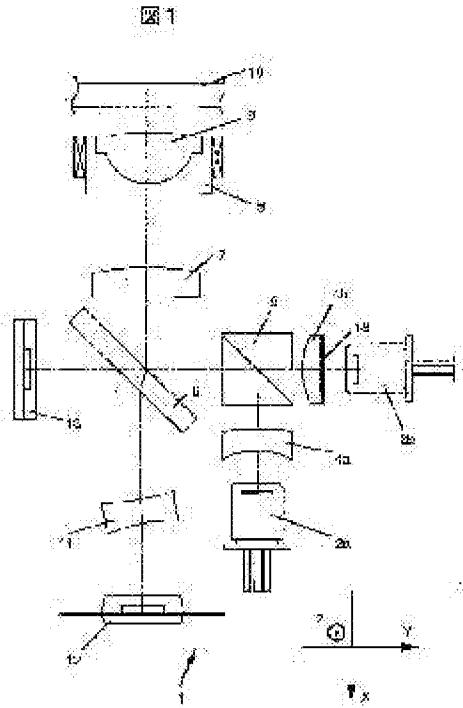
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(54) OPTICAL HEAD AND OPTICAL DISK DEVICE USING IT

(57)Abstract:

PROBLEM TO BE SOLVED: To miniaturize an optical head which is adaptable to CD-R recording and has compatibility of DVD/CD while securing its performance.

SOLUTION: At least two laser beam sources of a first laser beam source which oscillates at a first wavelength of 620-680 nm wavelength band and a second laser beam source which oscillates at a second wavelength of 750-810 nm wavelength band, a collimator lens which is provided in order to form luminous fluxes exited from the first and second laser beam sources into nearly parallel luminous fluxes respectively, and optical part which synthesizes the optical path of the luminous fluxes exited from the first and second laser beam sources is prepared in the optical path between the first and second laser beam sources and the collimator lens, are included. Also, a first auxiliary lens having a function which diverges the luminous flux is arranged in the optical path



between the optical path synthesizing part and the first laser beam source, and a second auxiliary lens having a function which converges the luminous flux is arranged in the optical path between the optical path synthesizing part and the second laser beam source.

LEGAL STATUS

[Date of request for examination] 20.07.2004

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3927372

[Date of registration] 09.03.2007

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]